Parapet Along the Roof: Injury Prevention in the Context of an Ancient, But Still Relevant, Commandment

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ABSTRACT:

Falling from a height accounts for 14.1% of all hospital admissions for traumatic injury. In 5% of cases, the injury is severe or critical, and in 1.5%, it is fatal. The dangers of falling have been recognized since time immemorial. Indeed, the Bible instructs us to build a parapet around the roof of our home so that, "...you may not bring the guilt of bloodshed on your house if someone falls from it" (Deuteronomy 22:8). This commandment highlights the relatively simple and practical means by which we can prevent falls. It is also one of a series of ethical laws that are presented to help us understand and obey the larger Biblical precepts of loving one's neighbor and guarding the sanctity of life. The concept teaches us that it is the responsibility of all individuals to be cognizant of others and to avoid harming people through negligence or carelessness. The aim of this article is to explain the commandment to build a parapet in the context of the risk of falling from a height and to expand on its wider implications. The present work was prompted in part by the alarming increase in fatal and near-fatal accidents in Israel in two particular populations.

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alling from a height is one of the leading causes of death and injury. According to the Israel National Trauma Registry, 223,140 patients were admitted to the 19 trauma centers in the country between 2010 and 2015 [1]. Falls were the most common cause of injury, accounting for 53.1% of all hospital admissions (117,767 patients) and 44.2% of severe casualty admissions. Specifically, falls from a height were responsible for 14.1% of all admissions (32,037 patients). Most of the patients (60.3%) were male. The age ranges were as follows: 25.8% were younger than 14 years, 9% were 15-29 years, 7.7% were 30-44 years, 9.2% were 45-59 years, 14.7% were 60-74 years, and 33.5% were more than 75 years of age. In 5% of cases, the injuries were categorized as very severe or critical. Among all patients admitted for a fall, 1.5% died either in the trauma bay, operating room, or hospital ward. In addition, 17.6% of the survivors required transfer to a rehabilitation facility, compared to 11.6% of patients with traumatic injuries from other causes [1].

Falling from a height is a unique factor in trauma because, while the agencies of falling are ubiquitous, the mechanism is simple. It does not require sophisticated machinery or modern tools, such as cars or guns, or special circumstances, such as war or terror attacks. The best way to manage falls is to prevent them before they happen. On one hand, the fact that falls can happen anywhere or anytime makes prevention challenging and involves multiple factors [2,3]. On the other hand, the simple mechanism of falls makes the means of their prevention simple as well. In his 1972 classic work on highway safety, William Haddon [4] formulated a matrix to demonstrate the effects of various factors before, during, and after collisions. He suggested that ideally, injury prevention should start at the primary stage, before the event even takes place. He defined 10 countermeasures that may be applied on an individual or societal basis, taking human, equipment, and environmental factors into account.

The dangers of falling from a height have been recognized since time immemorial. Indeed, the Bible (Deuteronomy 22:8) specifically instructs us to build a parapet around the roof of our home to prevent others from falling from it. This commandment provides a practical solution to a particularly dangerous setting and also correlates with general commandments to honor the sanctity of life and to love our neighbors.

THE BIBLICAL PARAPET COMMANDMENT

The Bible contains several universal precepts to guide our interrelationships with others. The Torah commands us, "You shall love your neighbor as yourself" (Leviticus 19:18). The Talmudic commentators emphasized the ethical core of this commandment, "That which is hateful unto you do not do to your neighbor" (Talmud, Tractate Sabbath 31:1). The Bible also contains many specific commandments that are intended to help us understand how to fulfill the general ones. For example, it instructs us to be considerate of people with disabilities, "You shall not insult the deaf or place a stumbling block before the blind" (Leviticus 19:14). We should pay our employees on time so they do not go hungry, "You shall not suppress a hired servant who is poor and needy...Each day you shall give him his wages" (Deuteronomy 24:14-15). There is also a commandment to keep the environment safe for others, "When you build a new house, make a parapet around your roof so that you may not bring the guilt of bloodshed on your house if someone falls from it"

(Deuteronomy 22:8). Practically, the parapet law highlights the danger of falling from a height and provides a serviceable means to prevent it from happening to others.

From a larger perspective, however, this law is not merely about parapets or guardrails or balustrades. Like the other ethical laws of the Torah, it is about the sanctity of life, the moral behavior expected from people, and the legal and sometimes fatal repercussions of human negligence, when one fails to love one's neighbor as oneself.

The present article was prompted in part by the alarming increase in fatal and near-fatal accidents in Israel in two particular populations.

CLASSIFICATION OF THE JEWISH COMMANDMENTS

There are 613 commandments (Mitzvot) in the Torah. Each can be classified in several ways, and its category can clarify its connotations and the meaning we derive from it.

First, the commandments can be categorized as positive or negative. Of the 613 commandments, 248 are considered positive and 365 negative. A positive commandment directs the individual to fulfill a specific task, perform a specific action, or entertain a specific thought ("You shall..."). A negative commandment directs the individual to avoid a specific task, action, or thought ("You shall not...").

In his 12th century book, *Sefer HaMitzvot* (Book of Commandments), Maimonides, a medieval Sephardic Jewish philosopher, concluded that the commandment to build a parapet around one's roof is both positive (positive commandment 184) and negative (negative commandment 298). It is positive in that the Torah is obligating us to remove obstacles and dangerous objects from our dwellings and to ensure that all structures are built in ways that prevents danger to others. It is negative in that the Torah is forbidding us to leave obstacles or dangerous objects/ areas on our property in a manner that might harm others.

The commandments may also be classified as between man and God and between man and his neighbor. The commandment to build a guardrail on one's roof is clearly social.

Other classifications distinguish between commandments that are time-related (e.g., wearing tefillin, which is done only during daytime) or not time-related (e.g., love thy neighbor), and between commandments for which we are given a logical explanation (e.g., building a parapet on one's roof) and those whose reason is presumed by the rabbinic commentators.

The rabbinic literature also divides the commandments into those that must be fulfilled in almost any circumstance (e.g., giving charity to the poor, respecting one's parents) and those relating to a specific circumstance (e.g., building a parapet).

Finally, some commandments are obligatory and one must make every effort to fulfill them (e.g., wearing tefillin, blowing the shofar on Rosh Hashanah) and others are voluntary. Maimonides suggested that the commandment to build a parapet is an example of a voluntary commandment because

people who do not intend to live in the home or people who live on ships or in tents do not need to fulfill it (Talmud, Tractate Brachot 11:2). Similarly, one is not obligated to dwell in a house solely for the purpose of putting a mezuzah on the doorframe.

FULFILLING THE COMMANDMENT TO BUILD A PARAPET

If one need not build a parapet on the roof so long as one does not move in to or live in the home, then on a construction site, the mandatory cautionary measures are necessarily different from those that apply to the place in which one actually lives. Thus, according to Maimonides' *Mishneh Torah* (The Book of Knowledge), synagogues and houses of study are excluded, "for they are not intended to serve as dwellings" (Laws of Murder and the Saving of Lives, chapter 11, verse 2). That is, the obligation depends on the function of the railed roof, not merely its existence.

The risk to others of a roof without a rail is a product of negligence and not a direct criminal action. Nevertheless, the absence of a criminal purpose is not a justification for failure to fulfill the obligation to build a parapet. Furthermore, if the parapet collapses, having once built it is not an excuse for not rebuilding it if its absence again poses a danger.

In the same chapter of *Mishneh Torah* (verse 5), Maimonides asked, if the person who owns the premises ensures that he is the sole person to use the roof and he believes that his risking his life is of no matter to others except himself, can the law still enjoin him to build a railing? The answer is yes. People are obligated to maintain their own safety as well, and failing to do so is punishable by law. This precept is true regardless of the authority (Talmudic or Biblical) responsible for the law or the specific punishment meted out by the authority for its transgression.

CONSTRUCTING THE PARAPET

The law stipulates that the parapet must be constructed in such manner as to ensure the prevention of physical injury and death. However, the obligation is limited to the removal of all hazards from the roof that might cause a person to fall from it. Thus, if the house is in a mountainous area and there is a public road located at a higher level than the roof, the owner is not responsible for any injury to a person who falls onto the roof from the road. The parapet is intended to prevent people from falling off the roof, not onto the roof (*Mishneh Torah*, Laws of Murder and the Saving of Lives, chapter 11, verse 2).

Following Talmudic law, Maimonides defined the height of the parapet as, "not less than ten handbreadths" (about 100 cm) (*Mishneh Torah*, Laws of Murder and the Saving of Lives, chapter 11, verse 3). This height would be sufficiently high enough to prevent someone from falling, but still within a reasonable range. Maimonides did not mention the specific materials to use, but he specified that the parapet must be strong enough to enable a person to lean on it without falling.

It is important to emphasize that Maimonides concluded that the commandment to build a parapet pertains to all places on one's property that might present a danger to the well-being of another. For example, if a person has a well or a cistern in his courtyard, he must erect a sand wall 10 handbreadths high around it or construct a cover for it (*Mishneh Torah*, Laws of Murder and the Saving of Lives, chapter 11, verse 4).

This expansion concurs with the law regarding the financial liability of creating an obstacle, which is discussed at length in the Talmudic and rabbinical literature. The Bible states that, "If a person opens a pit or if a person digs a pit and does not cover it, and a bull or a donkey falls into it, the owner of the pit shall pay" (Exodus 21:33-34). The Talmud explains that the law applies to all other animals as well, as "the scripture spoke in the common present" (Talmud, Tractate Baba Kamma 54:2). This description is interpreted to mean that the Torah provides the common example from which further regulations are derived.

RELEVANCE OF THE PARAPET LAW TODAY

The present work was prompted in part by the alarming increase in fatal and near fatal accidents in Israel in two particular populations.

Most accidents in children under 5 years of age occur in the home. One of the leading causes of accidental death in this age group, particularly in the summer months, is drowning [5]. In Israel, drowning accounts for 30% of all pediatric deaths, closely following road accidents (37%) [6]. Indeed, the updated policy of the American Academy of Pediatrics [7] emphasizes the importance of building barriers around pools, particularly because approximately 70% of children under the age of 5 years who have been in drowning accidents were not expected to be in or around a pool at the time. Stairwells pose another important danger. People must be cognizant to the need to place gates and fences at the appropriate places in their home to prevent unnecessary accidents.

In addition, Israel has recently witnessed a rise in work accidents, and more than half of them have occurred on construction sites. In the first 6 months of 2019, 43 fatal work accidents were documented, 24 of them on construction sites, and the numbers continue to rise. Falling from a height accounted for 40% of the fatal work accidents and 50% of the work accidents in the construction industry [8]. Prevention of those accidents is an important goal today [2,3] as it was in the past.

Although Maimonides did not assign the same precautions to construction sites as to dwellings, he made clear that the people in charge of a certain place are also responsible for the safety of their workers. Hence, site builders should be very careful regarding their obligation to take all means necessary to prevent their workers from being injured by falls or by other exposure to dangerous elements (*Mishneh Torah*, Laws of Murder and the Saving of Lives, chapter 11, verse 4).

CONCLUSION

Falling from a height may cause a complex array of injuries, and has been considered a major cause of morbidity and mortality since time immemorial. The risk was well recognized in Biblical times and was discussed in detail by commentators of the Bible, especially the 12th century jurist and philosopher, Maimonides. Although there has been substantial improvement in the treatment and outcome of trauma, a basic tenet recognized by ancient scholars still holds true today, namely, that the best medicine in these cases is prevention. The optimal means of prevention may consist of relatively simple and obvious cautionary measures, such as building a railing on one's roof. And by extension, as a rule, we need to recognize our responsibility, both personal and collective, to prevent negligent harm or injury to others.

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Glossary

Mezuzah: (literally: Doorpost) is a small scroll made of parchment containing fundamental verses from the Torah. The scroll is rolled up, usually in a small case, and affixed to the doorpost.

Shofar: Ram's horn (usually), which makes a special musical sound while blowing in it. Blowing the shofar is usually done during the Jewish High Holiday period of Rosh Hashanah and Yom Kippur.

Teffilin: (comes from the word "prayer" in Hebrew) Phylacteries. A pair of two black leather boxes containing small rolled up parchment scrolls with fundamental verses from the Torah written on them. The teffilin are worn on the head and arm during daily morning prayers.

Torah: Derived from the word "Teaching". It refers to the first five books of the Bible: Genesis, Exodus, Leviticus, Numbers, and Deuteronomy. It is also known as the Pentateuch or the Five Books of Moses. It includes laws and regulations incorporated in the text, which starts with God's creating the world and ends with the People of Israel about to enter the Promised Land.